

PROCEEDINGS OF THE CLUB

OCTOBER 10, 1911*

The meeting of October 10, 1911, was held at American Museum of Natural History at 8:15 p.m., President Rusby presiding. Forty persons were present.

The minutes of the meetings of May 8 and May 31 were read and approved. Professor R. A. Harper, Columbia University, Dr. C. W. Ballard, 115 W. 68th Street, F. D. Fromme, Columbia University, A. B. Stout, New York Botanical Garden, and Miss C. Rabinowitz, New York City, were then proposed for membership.

The report of the secretary on the method of changing the day of a regular meeting was accepted. Dr. E. B. Southwick, chairman of the Field Committee reported progress. A similar report was offered by Dr. Rusby, acting for the committee to revise the constitution.

Professor R. A. Harper, Dr. C. W. Ballard, F. D. Fromme, A. B. Stout, and Miss C. Rabinowitz were elected to membership.

The scientific program consisted of a lecture on "Some Edible and Poisonous Mushrooms," by Dr. W. A. Murrill. The lecture was illustrated with lantern slides which had been made from photographs of specimens recently collected in the vicinity of New York City and colored while the specimens were in a fresh condition, thus enabling the artists to reproduce the natural coloration of the specimens photographed. The speaker stated that the exceptionally large number of recent deaths due to poisonous species of mushrooms was no doubt attributable to the abundant crops of *Amanita phalloides* and *Amanita muscaria* which have followed the copious rainfall of this season. Slides showing the poisonous species in several stages of growth were exhibited and the special marks of identification were pointed out. Following these were shown slides of some of the edible mushrooms easily confused with the poisonous varieties. The two most characteristic features of the poisonous mushroom are the "death

* Inadvertently omitted from the January issue of TORREYA.

cup" or volva, and the "ring" or annulus. The careless mushroom hunter may pull up a specimen leaving the volva still buried in the earth, or the annulus, which is a more or less fragile structure, may have already disappeared and serious consequences result from the oversight.

Dr. Murrill wished to emphasize the fact that there were no rules or tests that could be applied with certainty. It is necessary that one gathering mushrooms for eating purposes should confine his operations to such species as he knows intimately in all their various forms.

The lecture was discussed by Dr. H. H. Rusby, Dr. Thomas, E. B. Southwick, and E. C. Edwards.

Meeting adjourned.

B. O. DODGE,
Secretary

DECEMBER 12, 1911

The meeting of December 12, 1911, was called to order by President Rusby at 8:15 p.m. Sixty-one persons were present. The minutes of November 14 were read and approved.

Dr. Rusby in a few remarks announced the death of Sir Joseph Hooker and an obituary notice from the *Evening Post* was read by Dr. E. B. Southwick.

The announced scientific program consisted of a lecture on "Methods of Detecting Adulterations in Foods and Drugs," by Dr. H. H. Rusby.

The lecturer stated that the methods of detecting adulterants in foods and drugs were physical and chemical. To the chemical matters he would merely make brief reference. They depend upon the well-known fact that the medicinal and nutritive values of drugs and foods, respectively, were due to certain of their constituents. The fact that these constituents are present in more or less definite percentages, enables the authorities to establish standard requirements as to these percentages. Such percentage may be lowered by the removal of part of the active constituent, or by the addition of foreign material. In either case, the article is adulterated, in the legal sense. Chemical

methods of examination are based upon the determinations of such percentages, by the extraction of the constituents in question and their subsequent identification.

In many cases an adulterant may be added in such small amount that it will not reduce the percentage of active constituent below the standard. In other cases, as to drugs, the active constituent is not known, or is not amenable to chemical determination, and for these and other reasons, the detection of adulterants by chemical methods is often impracticable, or even impossible. In many such cases, detection is possible by physical methods. In the lecturer's opinion, the number of cases in which physical methods could determine quality while chemical methods could not, was much greater than the number of those in which the conditions were reversed. Hence, the great importance of microscopical analysis, a method that is yet in its infancy.

The method of physical examination most generally useful is that of ordinary examination, by sight, touch, smell, fracture, etc., on the part of an experienced examiner, perfectly familiar with the articles, but very often, especially in the case of finely powdered substances, these methods would wholly fail. Then recourse must be had to the compound microscope. The anatomical elements of vegetable substances, however minute, are in most cases quite as distinctly characteristic as are the entire plant bodies to which they pertain, and all that is necessary is to magnify their appearance by the aid of the compound microscope.

Numerous lantern slide illustrations were employed to show the distinctive elements in various drugs and their principal adulterants, these pertaining to trichomes, epidermis, fibers, stone-cells, crystals, and starch-grains.

Meeting adjourned.

B. O. DODGE,
Secretary

JANUARY 9, 1912

The first meeting of the Club for 1912 was held at the American Museum of Natural History at 8:15 p.m. Vice-President Barnhart presided. Twenty-two persons were present.

This being the annual meeting, reports were presented by the various officers.

The report of the Treasurer was presented and upon motion referred to an Auditing Committee.

The Secretary reported that fourteen meetings had been held during the year with a total attendance of 363, and an average attendance of 26. Nine persons have been elected to membership, and eight resignations have been received and accepted. Seven illustrated lectures were delivered during the season, at which the combined attendance was 262.

The editor reported that the BULLETIN for the year 1911 contains 570 pages and 35 plates, and that the expense of its publication was slightly in excess of the amount allowed for it by the Budget Committee.

The editor of TORREYA presented a special report for that periodical.

The chairman of the Field Committee reported that twenty-five meetings were advertised during the year. The total number that took advantage of the field trips was 74. The recommendations contained in this report were adopted.

As chairman of the Local Flora Committee, Dr. N. L. Britton gave a brief report of the investigations carried on by Mr. Norman Taylor on the local flora. The work of Mr. Taylor will soon be ready for publication.

Dr. W. A. Murrill, chairman of the Committee on Cryptogamic Flora, reported that considerable progress had been made in the collection and study of local material. Many colored illustrations of the fleshy fungi from New York City, Long Island, and Massachusetts have been prepared for publication and public exhibition.

The report of the Program Committee was read and placed on file.

Dr. W. Mansfield, delegate to the council of the New York Academy of Sciences, reported that a sum of money had been set aside to be used in defraying the expenses of lectures held under the auspices of the affiliated societies. A motion was carried to apply to the Council for twenty-five dollars to pay the expenses of Dr. F. Shreve, who will lecture before the Club February 13.

The resignations of Mrs. Ruth Price Cohn, Mrs. J. N. Trainer, Misses Fanny Julien, Caroline Dana, and Catherine Murray were read and accepted. Dr. W. D. Johnston and Dr. W. Marquette, of Columbia University, Professor L. S. Hopkins, of Peabody High School, Pittsburgh, Dr. G. Bovard, University of Southern California, Los Angeles, and Miss Ellen Shaw, of New York City, were elected to membership in the Club.

The election of officers for the year 1912 resulted as follows:
President, Edward S. Burgess.

Vice-Presidents, John Hendley Barnhart and Herbert Maule Richards.

Secretary and Treasurer, Bernard O. Dodge.

Editor, Philip Dowell.

Associate Editors, John Hendley Barnhart, Jean Broadhurst, Ernest Dunbar Clark, Alexander William Evans, Robert Almer Harper, Marshall Avery Howe, Herbert Maule Richards and Norman Taylor.

Dr. W. Mansfield was elected Delegate to the Council of the New York Academy of Sciences.

The following committees were appointed by the President for the year 1912:

Finance Committee, John I. Kane and Robert A. Harper.

Program Committee, Elizabeth G. Britton, Fred J. Seaver, C. Stuart Gager and Jean Broadhurst.

Committee on Local Flora, N. L. Britton, Chairman; PHANEROGAMS, N. L. Britton, C. C. Curtis, E. P. Bicknell, K. K. Mackenzie, Norman Taylor and E. L. Morris; CRYPTOGRAMS, W. A. Murrill, E. G. Britton, Tracy E. Hazen, M. A. Howe and Philip Dowell.

Budget Committee, H. H. Rusby, E. S. Burgess, M. A. Howe, J. H. Barnhart, B. O. Dodge, Philip Dowell and N. L. Britton. Meeting adjourned.

B. O. DODGE,
Secretary